

# ATTACHMENTS



Telecommunications for the Deaf & Hard of Hearing, Inc.  
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December 19, 2012

Chairman Julius Genachowski  
Commissioner Robert McDowell  
Commissioner Mignon Clyburn  
Commissioner Ajit Pai  
Commissioner Jessica Rosenworcel

VIA EMAIL

Dear Chairman & Commissioners:

Telecommunications for the Deaf and Hard of Hearing, Inc. (“TDI”), Deaf and Hard of Hearing Consumer Advocacy Network (“DHHCAN”), Association of Late-Deafened Adults (“ALDA”), Hearing Loss Association of America (“HLAA”), and National Association of the Deaf (“NAD”), to be referred to as “Consumer Groups,” understand that the Commission is circulating an order with emergency rules regarding Internet Protocol Captioned Telephony Service (“IP CTS”). We understand that the emergency rules would, among other things, require new users of IP CTS to provide a certification by an audiologist or other professional certifying hearing loss of a certain level (*e.g.*, more than -70 dB loss) prior to signing up for and using IP CTS. Consumer Groups respectfully object to the adoption of any such user certification requirements, whether on a permanent or temporary basis, without input from consumer groups and other interested stakeholders that represent/serve deaf, hard of hearing, deaf-blind, and speech-disabled consumers. A professional certification requirement or a moratorium on new users would harm consumers who need access to captioned services.

Prior to adopting any rules, the Commission should follow its standard notice and comment process and work collaboratively with consumer groups and other stakeholders to balance any perceived need for user certification with the burdens of such certification. The opportunity for notice and comment is critical as the contemplated rules will affect a significant consumer group, may impose an undue burden, and may run afoul of the principle of functional equivalency. It is also critical because the dB level of hearing loss alone for an individual does **not** adequately capture those individuals who may have a lower dB loss, and can hear that someone is talking, but are unable to fully comprehend what exactly is being said (this is commonly referred to in the profession as poor “speech discrimination”). This is particularly true when the consumer is connected to a phone line that is noisy, muffled, unclear or otherwise distorted and which by its very nature provides none of the visual clues that someone with hearing loss typically relies upon. We believe a 70 dB requirement could penalize people with fluctuating hearing loss, such as Meniere’s Disease, who might need CTS on certain days. There are people with hearing loss that may be lower than the proposed threshold, but also have central auditory processing disorder that can benefit more from CTS. There are also people with a lesser hearing loss who can hear well in a quiet setting, but not in a noisy environment. Such ranges of differences may or may not be evaluated when the audiogram is provided, and the Commission would benefit greatly from a thorough

investigation and review on this issue with a number of audiologists from Gallaudet University and other institutions.

The emergency rules will significantly impact a large number of citizens. A recent study by Johns Hopkins University establishes that one in five Americans 12 years and older are deaf or hard of hearing.<sup>1</sup> As we stated in our recent VRS comments, “[u]nlike a low income consumer who can produce documents to prove eligibility for the Lifeline program, a deaf and hard of hearing consumer is unlikely to have a document that demonstrates the consumer’s hearing loss.”<sup>2</sup> For those who have been deaf since birth, a recent audiogram may not be readily at hand. For people who have not seen an audiologist in several years, it means an additional, unplanned visit. Requiring consumers who are deaf or hard of hearing to make any appointment to see an audiologist to certify hearing loss will come at a cost of time and money to those individuals.<sup>3</sup>

Further, a requirement for an audiologist or other professional certification is inconsistent with Congress’ mandate that Telecommunications Relay Services (“TRS”) be functionally equivalent. As the Consumer Groups stated in their “TRS Policy Statement,” functional equivalency must be the standard filter through which every TRS program action proposed or taken by the Commission, consumer groups, and TRS providers is assessed.”<sup>4</sup> A leading principle set forth in the *Policy Statement* is that the “TRS experience for an individual who is deaf, hard of hearing, deaf-blind or speech-disabled must, at the minimum, be equivalent to that of a call between two hearing persons on the telephone or over the Internet.”<sup>5</sup> Requiring an appointment with an audiologist as a precondition to using IP CTS services does not meet the “functional equivalency” standard or the principle set forth in the *Policy Statement* that the TRS experience must be “equivalent to a call between two hearing persons on the telephone network or over the Internet.” Stated simply, hearing consumers do not need to take time out of their schedules for medical appointments and incur additional medical expenses when they wish to utilize the Internet and communications facilities.

In addition, creating a professional certification requirement or moratorium on registration puts the burden of the rules directly on the backs of the consumers who need IP CTS. Petitions filed by consumer groups in 2004 and again in 2009 make it clear that CTS has the ability to change lives, to allow people who had given up on the ability to use a phone to be able to connect again with friends, family and at work. Anything that impedes equal access to telecommunications services for people who are deaf or hard of hearing flies in the face of the intent of Title IV of the Americans with Disabilities Act.

With these burdens and principles in mind, the Consumer Groups request that the Commission refrain from issuing emergency rules requiring an audiologist or other professional certification of hearing loss, and instead proceed with an expedited notice and comment proceeding that enables consumer groups and other stakeholders that represent/serve people who are deaf, hard of hearing, deaf-blind, and speech-

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<sup>1</sup> Vol. 171 Arch. Intern Med No. 20, at 1851 (Nov. 14, 2011).

<sup>2</sup> *In the Matter of Structure and Practices of the Video Relay Service, Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CG Docket Nos. 10-51, 03-123, Comments of Telecommunications for the Deaf and Hard of Hearing, Inc. *et al.* to Further Notice of Proposed Rulemaking, at 44 (March 9, 2012) (“Comments of Consumer Groups”).

<sup>3</sup> Comments of Consumer Groups, at 44-45.

<sup>4</sup> Notice of Ex Parte Meeting, GN Docket Nos. 03-123 & 10-51, Attachment, *Consumer Groups TRS Policy Statement - Functional Equivalency of Telecommunications Relay Services: Meeting the Mandate of the Americans with Disabilities Act*, at 1 (April 12, 2011) (“*Policy Statement*”).

<sup>5</sup> *Policy Statement*, at 2 (April 12, 2011).

disabled to comment on the appropriate eligibility requirement. This could set a dangerous precedent for other forms of TRS.

Thank you for your consideration. We fully support the Commission's efforts to minimize wherever possible any chance of fraud, waste, or abuse with any form of TRS.

Sincerely yours,

Claude Stout  
Executive Director,  
Telecommunications for the Deaf  
and Hard of Hearing, Inc.

Andrew Phillips  
Policy Attorney  
National Association of the Deaf

Brenda Estes  
President  
Association of Late-Deafened Adults, Inc.

Cheryl Heppner  
Vice Chair  
Deaf and Hard of Hearing Consumer  
Advocacy Network

Lise Hamlin  
Director, Public Policy Advocacy  
Hearing Loss Association of America

cc: Kris Monteith, Chief, Consumer & Governmental  
Affairs Bureau

Karen Peltz Strauss, Deputy Chief, Consumer  
& Government Affairs Bureau

Gregory Hlibok, Chief, Disability Rights Office

*Shaping An Accessible World*



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December 20, 2012

Chairman Julius Genachowski  
Commissioner Robert McDowell  
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Commissioner Ajit Pai  
Commissioner Jessica Rosenworcel

VIA EMAIL

Dear Chairman & Commissioners:

On behalf of Americans with hearing loss who cannot hear on the phone the Hearing Loss Association of America protests strongly the Commission's proposal of emergency rules that could put a moratorium on IP CTS and/or introduce stringent certification requirements. This is a rash, short-sighted move that will impact thousands of people in their everyday lives. It is a move to solve the perceived problem of a fund going broke on the backs of consumers. There are other avenues that the FCC can take to avoid a short fall in the Federal TRS fund and to ensure that the providers of services use TRS fund properly.

The introduction of captioned telephones represents the first time a relay service that truly meets the needs of this population who need to be able to use their residual hearing to understand the conversation to the best of their ability and to read captions when the dialogue is missed. These people are teenagers, boomers, veterans, lawyers, small business owners, teachers, doctors, mothers, fathers, husbands, wives, sons and daughters, who are doing their best to get an education, earn a living, pay their taxes, interview for a job, keep healthy, raise a family. To take away their ability to stay connected in the most common way of communicating in this day and age is discriminatory, and goes against the very intent of the ADA and the FCC's own regulations of functional equivalency.

The proposed emergency rule for certifying someone's eligibility to use the service demonstrates clearly a zero understanding of hearing loss and how it impacts an individual's ability to hear and understand what is being said. The decibel level of someone's hearing loss will tell you very little about that person's ability to discriminate speech, especially over the phone.

In fact, a quick review of the studies on the subject reveals that "The overall results of the studies on the effect of audibility demonstrate that audibility cannot adequately predict the reduced speech recognition of hearing-impaired listeners with moderate or severe losses." ("Speech recognition of hearing-impaired listeners: Predictions from audibility and the limited role of high-frequency amplification" by Teresa Y. C. Ching, Harvey Dillon, and Denis Byrne,

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October, 1997.) Moderate through severe hearing loss covers a range from 41 dB HL to 90 dB HL. Audibility is a function of both the degree of hearing loss and configuration or shape of the hearing loss. This cannot be reduced to a signal decibel number.

It should come as no surprise to the FCC that usage of this service is high. This is not a new service. The market has always been there and growing steadily. What's new is that there is an increased understanding by relay service providers of how to market to the people who can benefit from the service.

HLAA is outraged at such a proposed emergency order and will not stand by and see an entire segment of consumers with hearing loss denied a service that they need to function at work, at home, and in all aspects of their daily lives.

Emergency, rash actions are not the answer. As noted in the letter HLAA signed with other consumer groups, a normal notice and comment cycle is the appropriate way to approach issues such as this. To do otherwise sets a terrible precedent not only by deviating from a tried and true process, but also acting for the first time to set qualifying measures for TRS services that have never been used before, forcing the very people who need to the service most to jump through hoops before they can use a telephone again.

In short, HLAA will not support an emergency order that creates a decibel cut off as a means to establish qualification for captioned telephone services, that sets a moratorium on registrations, or in any way rations this vital service to consumers with hearing loss who need it.

Sincerely,

A handwritten signature in black ink that reads "Brenda Battat".

Brenda Battat  
Executive Director

cc: Kris Monteith, Chief, Consumer & Governmental Affairs Bureau  
Karen Peltz Strauss, Deputy Chief, Consumer & Government Affairs Bureau  
Gregory Hlibok, Chief, Disability Rights Office

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December 20, 2012

Chairman Julius Genachowski  
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**VIA EMAIL**

Dear Chairman & Commissioners:

The Technology Access Program at Gallaudet University is concerned about the Commission's proposal of emergency rules that could put a moratorium on IP CTS, or introduce stringent certification requirements. We are particularly concerned about the suggestion of a "quick-fix"-style eligibility requirement based on a single value derived from peoples' audiograms.

Audiograms are notoriously poor predictors of speech recognition performance by people with a hearing loss. Moreover, even more sophisticated prediction algorithms fall short, as we will explain below. Imposing any such criterion would necessarily exclude people from the IP CTS program whose speech recognition performance is too poor to allow them access to alternatives.

In Ching, T. Y., Dillon, H., & Byrne, D. (1998). Speech recognition of hearing-impaired listeners: Predictions from audibility and the limited role of high-frequency amplification. *The Journal of the Acoustical Society of America*, 103, pg. 1128., the authors state that "The overall results of the studies on the effect of audibility demonstrate that audibility cannot adequately predict the reduced speech

recognition of hearing-impaired listeners with moderate or severe losses." Moderate through severe hearing loss covers a range from 41 dB HL to 90 dB HL. Audibility is a function of both the degree of hearing loss and configuration or shape of the hearing loss. A single number, as the Commission is suggesting for use as a criterion value, is even inadequate for characterizing audibility – much less speech understanding.

The field of hearing science has long tried to find a good predictor of speech understanding by using simple audiometric testing that is efficient and reliable - like the audiogram. However, these attempts have had limited success, so more sophisticated measures, like the Speech Intelligibility Index (referred to in the article cited above) have been developed. Even these more complex methods, which attempt to take into account auditory distortions that can be created by hearing loss and the detrimental impact of noise, have not yielded the kind of predictive gains that were hoped for by their developers. In some ways, this is not terribly surprising. Speech understanding is an extremely multifaceted process that can be impacted by a large variety of factors that go well beyond the functioning of any individual's peripheral auditory system as delineated in an audiogram or a value derived from the audiogram.

In addition, placing a dB HL limit on the use of IP captioned telephone service seems to make the assumption that the acoustic signal is fully audible for anyone with a better average hearing loss than the defined limit. If the commission wants to use audibility as an indicator of speech understanding, then it follows that there must be evidence that the acoustic signal provided over a telephone achieves adequate audibility across the telephone bandwidth (frequency range) in both quiet and noisy environments for the person with hearing loss - regardless of whether they use a hearing device or not. We do not believe there is such evidence and would suggest that full audibility cannot be achieved without the aid of a hearing device for anyone with a moderate hearing loss or greater - especially given the typical configuration of hearing loss, where there is more loss in the higher frequency regions. The commission must consider situations in which individuals with hearing loss use the telephone, but do so without a hearing device for whatever reason.

We respectfully suggest that, given the difficulty of evaluating speech recognition performance on the telephone for people with hearing loss, an emergency order drawing on simple audiogram-based criteria would be shortsighted. We also suggest that if changes to the IP CTS program are necessary, the options for change and their ramifications must be fully explored in an NPRM, with full consideration of comments by all stakeholders, including the community of IP CTS users, and professionals in the field of speech and hearing science.



Respectfully submitted,

*/s/ Linda Kozma-Spytek, M.A., CCC-A*  
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*/s/ Christian Vogler, PhD*  
Director, Technology Access Program  
Co-Principal Investigator, RERC on  
Telecommunications Access  
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December 20, 2012

**Cc (by e-mail):**

Kris Monteith, Chief, Consumer & Governmental Affairs Bureau

Karen Peltz Strauss, Deputy Chief, Consumer & Government Affairs Bureau

Gregory Hlibok, Chief, Disability Rights Office

